

### **REMARKS**

Favorable reconsideration and allowance of the present application in view of the foregoing amendments and the following remarks are respectfully requested.

Claims 1-2, 4-27, 29, and 31-32, including independent claims 1, 5, 16, 22, and 31, are currently pending in the present application. For instance, independent claim 1 is directed to a heat transfer material comprising a substrate layer, a release coating layer, a peelable film layer overlying said release coating layer, and a discontinuous polymer layer overlying said peelable film layer. The peelable film layer is melt-flowable at a transfer temperature. The discontinuous polymer layer includes an opacifying material and a crosslinking agent.

In the Office Action, all of the pending claims were rejected based on the judicially created doctrine of non-statutory double patenting. Applicants agree to consider providing a terminal disclaimer to overcome the rejection.

In the Office Action, independent claims 1, 5, 16, 22, and 31 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,863,781 issued to Kronzer in combination with another reference. Kronzer is directed to a melt transfer web having a conformable layer which enables the melt transfer web to be used to transfer print to uneven surfaces. For example, the melt transfer web includes a carrier substrate sandwiched between a top barrier layer and a bottom barrier layer. A conformable layer is coated on top of the top barrier layer and a release layer is coated on top of the conformable layer. Alternatively, the conformable layer and the release layer may be a single composite layer.

Referring to Kronzer, the transferable portion of the melt transfer web includes the ink layer, a release layer, and a conformable layer. The conformable layer will, when heated, soften and flow in order to allow the ink to contact uneven workpiece surfaces. Col. 5, lines 29-31. Kronzer also discloses that as heat and pressure are applied to the overlying melt transfer webs, the conformable-release layer (used as a combined layer in this embodiment) begins to soften and flow. Col. 6, lines 43-45. As such, Kronzer teaches that both the release layer and the conformable layer are melt flowable at the transfer temperature. Kronzer also discloses that any conventional ink may be used.

In contrast, independent claim 1 requires that the heat transfer material comprise a substrate layer, a release coating layer, a peelable film layer overlying said release coating layer, and a discontinuous polymer layer overlying said peelable film layer. The peelable film layer is melt-flowable at a transfer temperature. The discontinuous polymer layer includes an opacifying material and a crosslinking agent. Referring to the present application, in order to provide the opacity needed for fabric decoration, the opaque coating must remain substantially on the surface of the fabric. Pg. 11, Paragraph 36. As such, the opaque coating does not become a fluid at or below the softening point of the peelable film. Pg. 11, Paragraph 36. The cross-linking agent can cross-link polymers in the layer to form of a cross-linked three-dimensional structure, which does not appreciably flow at the transfer temperatures. Pg. 14, Paragraph 42. The opacifying material can be a particulate material which scatters light at its interfaces so that the coating is relatively opaque. Pg. 11, Paragraph 35.

Not only does Kronzer fail to disclose or suggest a crosslinking agent in any layer of the transferable portion, as admitted by the office action, Kronzer also fails to provide any motivation to modify either the release layer (or the conformable layer) as suggested by the Office Action. In fact, Applicants respectfully submit that adding a crosslinking agent to either of these layers would adversely affect the function of these layers since the addition of a crosslinking agent would affect the melt flowable characteristics of those layers.

Applicants further submit that any motivation for modifying one of the transferable layers of Kronzer with a crosslinking agent can only stem, improperly, from the present application. Plainly, the Examiner's only incentive or motivation for so modifying Kronzer to include a cross-linking agent in the manner suggested in the Office Action results from using Appellant's disclosure as a blueprint to reconstruct the claimed invention out of isolated teachings in the prior art, which is improper under 35 U.S.C. § 103. Accordingly, it is respectfully submitted that any such modification of the cited references relies on the impermissible use of hindsight, which cannot be successfully used to support a prima facie case of obviousness.

Specifically, the Office Action attempts to combine the teachings of U.S. Pat. No. 5,879,790 to Sogabe, et al. to somehow overcome the deficiencies of Kronzer in rejecting claims 1-2, 4, 11-15, 22-28, and 31-32. The Office Action cites Sogabe, et al. as teaching a color ink layer containing a coloring agent, binders, of vinyl resins, and epoxy resins. These additives are including in the ink layer of Sogabe, et al. Applicants respectfully submit that one of ordinary skill in the art would not be motivated to use the epoxy resins of Sogabe, et al.'s color layer in the release layer of Kronzer for additional

reasons to those discussed above. The epoxy resin is disclosed in Sogabe, et al. as influencing the properties of the color layer. Column 6, lines 5-7. Nowhere does Sogabe, et al. disclose or suggest the use of crosslinking agents in a release layer that does not contain color. In Kronzer, the release layer overlies ink to protect the ink once applied to a substrate. Applicants submit that modifying the release layer of Kronzer with the color layer of Sogabe, et al. would adversely affect the function of the release layer of Kronzer because adding color to the release layer would cover and obscure the ink.

Also, the Office Action combines U.S. Pat. No. 5,468,532 to Ho, et al. with Kronzer in rejecting claims 5-10, 16-17, and 19-21. Ho, et al. is cited as teaching the use of cross-linking agents incorporated into acrylic polymers in thermal or hot transfer media in an attempt to modify Kronzer. Ho, et al. teaches that the color layers comprise a binder, a color agent, and various optional ingredients. Column 3, lines 40-43. The binder may include a copolymeric binder that may be crosslinked. Column 3, lines 46-49; Column 4, line 59. However, Ho, et al. discloses the use of this crosslinked binder only in the color layers of Ho, et al. Column 3, lines 40-42.

Applicants respectfully submit that one of ordinary skill in the art would not be motivated to use the crosslinking agents of Ho, et al.'s color layer in the release layer of Kronzer for additional reasons to those discussed above. The crosslinking agent is disclosed in Ho, et al. as influencing the properties of the color layer. Column 4, lines 60-62. Nowhere does Ho, et al. disclose or suggest the use of crosslinking agents in a release layer that does not contain color. In Kronzer, the release layer overlies ink to protect the ink once applied to a substrate. Applicants submit that modifying the release

layer of Kronzer with the color layer of Ho, et al. would adversely affect the function of the release layer of Kronzer because adding color to the release layer would cover and obscure the ink.

Additionally, claims 1-2, 4, 11-15, 22-28, and 31-32 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kronzer in view of U.S. Patent No. 5,362,548 issued to Hiyoshi, et al. As explained above, no motivation exists to use a crosslinking agent in the layers of Kronzer. In order to overcome the deficiencies of Kronzer, Hiyoshi, et al. is cited as teaching a color ink layer containing a coloring agent, binders of vinyl resins, and epoxy resins. However, Applicants respectfully submit that one of ordinary skill in the art would not be motivated to combine the teachings of the color layer of Hiyoshi, et al. into the release layer of Kronzer. As discussed above, in Kronzer, the release layer overlies the ink layer to protect the ink once applied to a substrate. Applicants submit that modifying the release layer of Kronzer with the color layer of Hiyoshi, et al. would adversely affect the function of the release layer of Kronzer. Specifically, a release layer of Kronzer incorporating the pigments and epoxy resin, as disclosed in Hiyoshi, et al. would not allow the ink of Kronzer to show through the release layer.

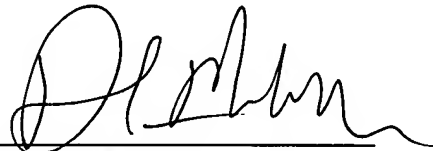
Applicant respectfully submits, however, that at least for the reasons indicated above relating to the independent claims, the pending dependent claims also patentably define over the cited references. However, Applicant also notes that the patentability of the dependent claims does not necessarily hinge on the patentability of the independent claims. In particular, some or all of the dependent claims may possess features that are independently patentable, regardless of the patentability of the independent claims.

It is believed that the present application is in complete condition for allowance and favorable action, therefore, is respectfully requested. Should any issues remain after consideration of this Amendment, Examiner Dicus is invited and encouraged to telephone the undersigned. Otherwise, Applicants respectfully request that a timely Notice of Allowance be issued in this case.

Please charge any additional fees required by this Amendment to Deposit Account No. 04-1403.

Respectfully submitted,

DORITY & MANNING, P.A.

A handwritten signature in black ink, appearing to read 'Alan R. Marshall', written over a horizontal line.

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